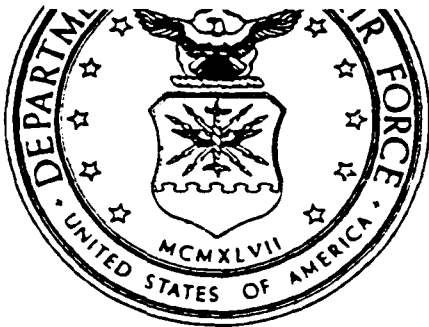
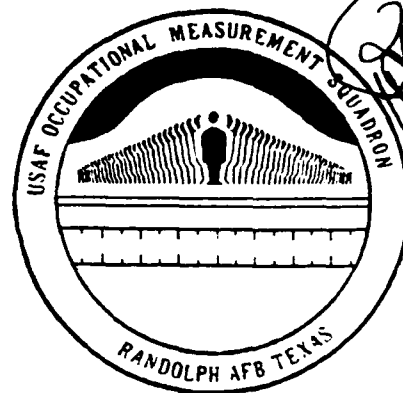


AD-A267 018



UNITED STATES
AIR FORCE



OCCUPATIONAL SURVEY REPORT

DTIC
ELECTE
JUL 19 1993

VEHICLE MAINTENANCE CONTROL AND ANALYSIS
CAREER LADDER

AFSC 472X4

AFPT 90-472-921

JUNE 1993

93-16102



OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT SQUADRON
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150-5000

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

**DISTRIBUTION FOR
AFSC 472X4 OSR AND SUPPORTING DOCUMENTS**

	<u>OSR</u>	<u>ANL</u> <u>EXT</u>	<u>TNG</u> <u>EXT</u>	<u>JOB</u> <u>INV</u>
AFIA/IMP	2			
AFMPC/DPMRPQ1	2			
AFMPC/DPMRAD5	1			
AL/HRD/HRMM	2	1m	1m	1
AL/HRT/DOS	1	1m	1m/1h	1
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
DEFENSE TECHNICAL INFORMATION CENTER	2			
HQ ACC/DPATD	3		3	
HQ AMC/DPATJ	3		3	
HQ ATC/TTOT	2		1	
HQ PACAF/DPAE	3		3	
HQ USAF/LGTV	1		1	
HQ USAF/LGTX	1			
HQ USAF/DPPT	1			
HQ USAFE/DPAD	3		3	
NODAC	1			
Standards Division (MAGTEC)	1			
USAFOMS/OMDQ	1			
USAFOMS/OMYXL	10	2m	5	10
345 TTS//TTOPT (LACKLAND AFB TX)	4	2	4	4
3250 TCHTW/TTS (LACKLAND AFB TX)	1		1	

m = microfiche only

h = hard copy only

DTIC QUALITY INSPECTED 8

Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE	iv
SUMMARY OF RESULTS	v
INTRODUCTION	1
Background	1
SURVEY METHODOLOGY	2
Inventory Development	2
Survey Administration	4
Survey Sample	4
Data Processing and Analysis	4
Task Factor Administration	7
SPECIALTY JOBS (Career Ladder Structure)	7
Overview of Specialty Jobs	7
Group Descriptions	10
Comparisons of Specialty Jobs	17
Comparison of Current Group Descriptions to Previous Survey Findings	17
ANALYSIS OF DAFSC GROUPS	18
Skill-Level Descriptions	18
Summary	23
AFR 39-1 SPECIALTY JOB DESCRIPTION ANALYSIS	23
JOB SATISFACTION	23
IMPLICATIONS	27

TABLE OF CONTENTS
(Tables, Figures, Appendices)

	<u>PAGE NUMBER</u>
TABLE 1 MAJCOM REPRESENTATION IN SAMPLE AFSC 472X4	5
TABLE 2 PAYGRADE DISTRIBUTION OF SAMPLE AFSC 472X4	6
TABLE 3 SELECTED BACKGROUND DATA FOR SPECIALTY JOBS	11-12
TABLE 4 JOB SPECIALTY COMPARISONS BETWEEN CURRENT AND 1983 SURVEY	19
TABLE 5 DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS CAREER LADDER JOBS (PERCENT).....	20
TABLE 6 AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY DAFSC GROUPS (RELATIVE PERCENT OF JOB TIME)	21
TABLE 7 REPRESENTATIVE TASKS PERFORMED BY 47254 PERSONNEL.....	22
TABLE 8 REPRESENTATIVE TASKS PERFORMED BY 47274 PERSONNEL.....	24
TABLE 9 TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 47254 AND DAFSC 47274 PERSONNEL (PERCENT MEMBERS PERFORMING).....	25
TABLE 10 COMPARISON OF 472X4 JOB SATISFACTION INDICATORS FOR CURRENT AND PREVIOUS SURVEY (Percent Members Responding).....	26
TABLE 11 COMPARISON OF JOB SATISFACTION INDICATORS FOR MEMBERS OF 472X4 SPECIALTY JOBS (PERCENT MEMBERS RESPONDING).....	28-31
FIGURE 1 VEHICLE MAINTENANCE CONTROL AND ANALYSIS SPECIALTY JOB AFSC 472X4 (N=272)	9
APPENDIX A SELECTED REPRESENTATIVE TASKS PERFORMED BY MEMBERS OF CAREER LADDER JOBS	32

PREFACE

This report presents the results of an Air Force Occupational Survey of the Vehicle Maintenance Control and Analysis (AFSC 472X4) career ladder. Authority for conducting occupational surveys is contained in AFR 35-2. Computer products used in this report are available for use by operations and training officials.

The survey instrument was developed by Mr Donald Cochran. Computer programming and administrative support was provided by Mrs Rebecca Hernandez and Ms Linda McDonald, respectively. Mr Robert L. Alton and Mrs Cynthia Luster analyzed the data and wrote the final report in a coordinated team effort with Mr Roberto B. Salinas, analyst of the Vehicle Maintenance career ladder survey report, dated December 1992. This report has been reviewed and approved by Major Randall C. Agee, Chief, Airman Analysis Section, Occupational Analysis Flight, USAF Occupational Measurement Squadron (USAFOMS).

Copies of this report are distributed to Air Staff sections and other interested training and management personnel. Additional copies may be requested from the USAF Occupational Measurement Squadron, Attention: Chief, Occupational Analysis Flight (OMY), 1550 5th Street East, Randolph AFB Texas 78150-4449.

JAMES L. ANTENEN, Lt Col, USAF
Commander
USAF Occupational Measurement
Squadron

JOSEPH S. TARTELL
Chief, Occupational Analysis Flight
USAF Occupational Measurement
Squadron

SUMMARY OF RESULTS

1. Survey Coverage: This report is based on data collected from 272 respondents, constituting 58 percent of all assigned AFSC 472X4 personnel and 69 percent of those receiving survey booklets.
2. Specialty Jobs: Two clusters and two independent jobs were identified in the career ladder structure analysis. One cluster and both independent jobs involved the primary day-to-day technical responsibilities of the career ladder. The remaining cluster was oriented toward managerial, administrative, and training activities.
3. Career Ladder Progression: The 5- and 7-skill level jobs were highly technical. Although 7-skill level personnel still devote over 50 percent of their relative duty time to nonsupervisory tasks across a number of different jobs, a shift toward supervisory functions is quite clear.
4. AFR 39-1 Specialty Descriptions: All descriptions accurately depict the nature of the respective jobs.
5. Implications: The Vehicle Maintenance Control and Analysis specialty presents a fairly stable and homogeneous career ladder. Job satisfaction was positive for most of the jobs identified with only marginal differences noted over the previous survey.

**OCCUPATIONAL SURVEY REPORT
VEHICLE MAINTENANCE CONTROL AND ANALYSIS
(AFSC 472X4)**

INTRODUCTION

This is an occupational survey report (OSR) of the Vehicle Maintenance Control and Analysis career ladder, AFSC 472X4. Since the last OSR, AFSC 472X4 personnel have incorporated tasks associated with the relatively new On-Line Vehicle Interactive Maintenance System (OLVIMS). This new technology has added to the complexity and the number of tasks performed by these personnel. This survey was requested by Headquarters Air Training Command (HQ ATC) to obtain current task and equipment data for use in evaluating the current training program. In addition, OSR data are needed to project, plan, and develop a new career development course for this career ladder. The last survey results pertaining to this specialty were published in June 1983.

Background

As described in AFR 39-1 Specialty Descriptions, personnel in this career ladder schedule, monitor, and analyze maintenance performed on vehicles and equipment; and manage the vehicle data collection system. Prior qualification in any 5-skill level AFSC in the 47XXX career field, including a minimum of 24 months' experience in that specialty, is mandatory for entry into this AFSC. Upon completion of a mandatory vehicle maintenance control and analysis course, personnel are awarded the semiskilled AFSC, and within a few months they qualify for a 5-skill level in this specialty. Consequently, there are very few 3-skill level personnel in this specialty at any point in time. Hence, this report will only cover the activities of the 5- and 7-skill level personnel as reflected by their Time in The Career Field (TICF) rather than Total Active Federal Military Service (TAFMS).

Base closures, Air Force Chief of Staff directives, and the post-Desert Storm drawdown are, at this writing, having a major impact on the Air Force Transportation career field. In the opening remarks of a message (dated Jun 92) to the Major Commands (MAJCOM) regarding an Air Force Transportation Total Quality Management Analysis Group (TTQMAG) Workshop, which convened 27-31 Jul 92 to objectively review and develop effective AFSC restructuring proposals, HQ USAF/LGTX stated "The Vehicle Maintenance Career Field, AFSC 472XX, must be restructured." The message goes on to say the number of maintenance specialties must be reduced to gain collective efficiencies, improve personnel and manpower management, and achieve training benefits. Eliminating the General Purpose specialty and further consolidation of the Special Purpose specialties have been strongly suggested. Other actions that are being examined to support the Air Force and transportation consistent with a reduced force structure

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

include the integration, realignment, elimination, or restructuring of AFSC 472XX/603XX (Vehicle Operator/Dispatcher) duties or specialties.

The formal training course for the Vehicle Maintenance Control and Analysis career ladder is presently being conducted at Lowry AFB CO. The course was originally collocated with the Vehicle Maintenance career field at Chanute AFB IL. At one time, the courses for the entire Vehicle Maintenance career field were being relocated to Lowry AFB CO. Since Lowry AFB was selected for closure, training for the Vehicle Maintenance specialties will be transferred to Lackland AFB TX. The last vehicle maintenance control and analysis class at Lowry is scheduled to graduate 16 Jun 93, and the Lackland operation will stand up Oct 93.

This survey, as mentioned before, was requested to gather the latest occupational data for the purpose of revising, or if need be, developing new training documents for the Vehicle Maintenance Control and Analysis career ladder. On 24-28 February 1992, at Chanute AFB IL, a Utilization and Training Workshop (U&TW) was held in which a tentative specialty training standard (STS) was developed by the attendees, with the stipulation that further adjustments to the document could be incorporated based on the latest OSR data. Survey data, in the form of a training extract, was provided to the Technical Training Center (TTC) in March 1992. The survey findings have since been used to update the tentative STS, which has put "rigor" in the on-the-job training (OJT) program and more hands-on training at the school. Additionally, a resident 7-skill level awarding course has been tentatively developed.

Though restructuring is occurring even as this report is being published, the summarized information contained within, even from a historical standpoint, could still prove to be of great value. The reader, having reviewed this report, will have a clear understanding of a specialty which has remained relatively stable in terms of the jobs performed since the last OSR, 9 years ago. The information provided from the survey findings can serve as a valuable tool for decision-making.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-472-921, dated June 1991. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, tasks from the previous survey instrument, and data from the last OSR. The preliminary task list was refined and validated through personal interviews with 39 subject-matter experts (selected to cover a variety of MAJCOMs and 472X4 career field functions) at the following locations (MAJCOM acronyms are those in use at the time inventory development was conducted):

BASE	REASON FOR VISIT
Davis-Monthan AFB AZ	TAC base with 2 computers for OLVIMS for 1,000 vehicles
Ellsworth AFB SD	SAC base with 2 computers for OLVIMS for 1,128 vehicles
Minot AFB ND	SAC base with 4 computers for 980 vehicles. Two computers are for OLVIMS and two for backup.
Kirtland AFB NM	MAC base with 2 computers for OLVIMS for 1,095 vehicles.
Gunter AFB AL	Location of the Standard Systems Center (SSC), the computer software development center for the Air Force.
Hanscom AFB MA	ADCOM base with 1 computer for OLVIMS for 284 vehicles.
Plattsburgh AFB NY	SAC base with 2 computers for OLVIMS for 560 vehicles.
Lowry AFB CO	Technical Training Center for this career ladder.
Eglin AFB FL	Test base for OLVIMS with 8 computers, 2 of which are dedicated to OLVIMS for 1,700 vehicles.
Hurlburt Field FL	AFSC base with 2 computers for OLVIMS for 612 vehicles.
Langley AFB VA	TAC base with 1 computer for OLVIMS for 700 vehicles.
Charleston AFB SC	MAC base with 1 computer for OLVIMS for 602 vehicles.

The resulting job inventory contained a comprehensive listing of 262 tasks grouped under 5 duty headings and a background section requesting such information as paygrade, job title, organizational level of assignment, and AFSC possessed prior to award of 47234.

Survey Administration

From August 1991 through November 1991, Military Personnel Flights (MPF) in operational units worldwide administered the inventory to job incumbents holding DAFSC 472X4. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Armstrong Laboratory/Human Resources Directorate (AL/HRD).

Each individual who completed the inventory first completed an identification and biographical information section and then checked each task performed in his or her current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount spent).

To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total of task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Personnel were selected to participate in this survey so as to ensure an accurate representation across MAJCOMs and paygrade groups. All eligible DAFSC 472X4 personnel were mailed survey booklets. Table 1 reflects the percentage distribution, by MAJCOM, of assigned personnel in the career field as of July 1991. The 272 respondents in the final sample represent 69 percent of the total personnel surveyed. Table 2 reflects the paygrade distribution for these respondents. As reflected in these tables, the survey sample is a very good representation of the career field population.

Data Processing and Analysis

Once the job inventories were received from the field, the booklets were screened for completeness and accuracy and optically scanned to create a complete case record for each respondent. Comprehensive Occupational Data Analysis Program (CODAP) then created a job description for each respondent, as well as composite job descriptions for members of various demographic groups. These job descriptions were used for much of the analyses reported in this OSR.

TABLE 1
MAJCOM REPRESENTATION IN SAMPLE
AFSC 472X4

<u>COMMAND</u>	<u>PERCENT ASSIGNED* (N=476)</u>	<u>PERCENT OF SAMPLE (N=272)</u>
TAC	21	22
SAC	20	22
USAFE	19	19
MAC	13	13
PACAF	12	11
ATC	6	5
AFSC	4	4
AFSPACECOM	2	2
OTHER	3	2

Total Assigned = 476

Total Surveyed = 392

Total in Survey Sample = 272

Percent of Assigned in Sample = 58%

Percent of Surveyed in Sample = 69%

* Assigned strength as of July 1991

TABLE 2
PAYGRADE DISTRIBUTION OF SAMPLE
AFSC 472X4

<u>PAYGRADE</u>	<u>PERCENT ASSIGNED*</u> (N=476)	<u>PERCENT IN SAMPLE</u> (N=272)
E-1 to E-3	-	-
E-4	25	23
E-5	36	37
E-6	22	22
E-7	16	16
E-8	0	0
E-9	-	1

- Less than 1 percent

* Assigned strength as of July 1991

NOTE: Columns may not add up to 100 percent due to rounding

Task Factor Administration

Personnel who make decisions about career ladder documents and training programs use task factor data (training emphasis (TE) and task difficulty (TD) ratings), as well as job descriptions. The survey process provides these data by asking selected E-6 and E-7 supervisors to complete either a TE or TD booklet. These booklets are processed separately from the job inventories, and TE and TD data, when applicable, are considered when analyzing other issues in the study.

Training Emphasis (TE). TE is defined as the amount of structured training that first-enlistment personnel need to perform tasks successfully. Structured training is defined as training provided by resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or any other organized training method. Twenty-seven experienced AFSC 472X4 NCOs rated tasks in the inventory on a 10-point scale ranging from 0 (no training required) to 9 (high TE required). Interrater agreement for these 27 raters was acceptable. The mean TE rating for the tasks in the inventory is 3.33, and the standard deviation is 1.72. Any task with a TE rating of 5.05 or greater is considered to have high TE.

Task Difficulty (TD). TD is defined as an estimate of the length of time the average airman takes to learn how to perform each task listed in the inventory. Forty-nine experienced AFSC 472X4 supervisors rated the difficulty of the tasks in the inventory on a 9-point scale ranging from 1 (easy to learn) to 9 (very difficult to learn). Interrater agreement for the 49 raters is also acceptable. TD ratings are normally adjusted so tasks of average difficulty have a value of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or greater is considered to be difficult to learn.

SPECIALTY JOBS (Career Ladder Structure)

A USAF Occupational Analysis begins with an examination of the career ladder structure. The structure of jobs within the Vehicle Maintenance Control and Analysis career ladder was examined on the basis of similarity of tasks performed and the percent of time spent ratings provided by job incumbents, independent of other specialty background factors.

Each individual in the sample performs a set of tasks called a job. Individual jobs are organized into similar units of work by an automated job clustering program. This hierarchical grouping program is a basic part of the Comprehensive Occupational Data Analysis Program (CODAP) system for job analysis. Each individual job description (all the tasks performed by that individual and the relative amount of time spent on those tasks) in the sample is compared to every other job description in terms of tasks performed and the relative amount of time spent on each task in the job inventory. The automated system is designed to locate the two job descriptions with the most similar tasks and percent time ratings and combine them to form a

composite job description. In successive stages, new members are added to initial groups, or new groups are formed based on the similarity of tasks performed and similar time ratings in the individual job descriptions.

The basic identifying group used in the hierarchical job structuring process is the Job. When there is a substantial degree of similarity between Jobs, they are grouped together and identified as a Cluster. Specialized Jobs too dissimilar to fit within the cluster are labeled Independent Jobs (IJs). The job structure information resulting from this grouping process (the various jobs within the career ladder) can be used to evaluate the accuracy of career ladder documents (AFR 39-1 Specialty Descriptions and STSs) and to gain a better understanding of current utilization patterns. The above terminology will be used in the discussion of the AFSC 472X4 career ladder structure.

Overview of Specialty Jobs

Structure analysis identified two clusters and two independent jobs within the survey sample of 272 airman. Based on task similarity and relative time spent, the division of jobs performed by AFSC 472X4 personnel is illustrated in Figure 1, and a listing of those clusters and independent jobs is provided below. The stage (ST) number shown beside each title is a reference to computer-printed information; the number of personnel in each group (N) is also shown.

- I. MAINTENANCE CONTROL AND ANALYSIS CLUSTER (ST0025, N=211)
 - A. Production Analysis (ST0050, N=131)
 - B. Deficiency Analysis (ST0034, N=5)
 - C. Maintenance Control (ST0053, N=61)
 - D. Section NCOIC (ST0033, N=14)
- II. ON-LINE VEHICLE INTERACTIVE MANAGEMENT SYSTEM (OLVIMS) SPECIALIST (ST0031, N=5)
- III. CONTRACT MAINTENANCE MONITOR (ST0048, N=6)
- IV. ADMINISTRATION CLUSTER (ST0006, N=24)
 - A. Management (ST0021, N=12)
 - B. Quality Assurance (ST0017, N=6)
 - C. Training (ST0059, N=5)

The respondents forming these groups account for 90 percent of the survey sample. The remaining 10 percent were performing tasks or series of tasks which did not group with any of the defined jobs. Job titles given by respondents which were representative of these personnel

Vehicle Maintenance Control and Analysis Specialty Jobs AFSC 472X4 (N= 272)

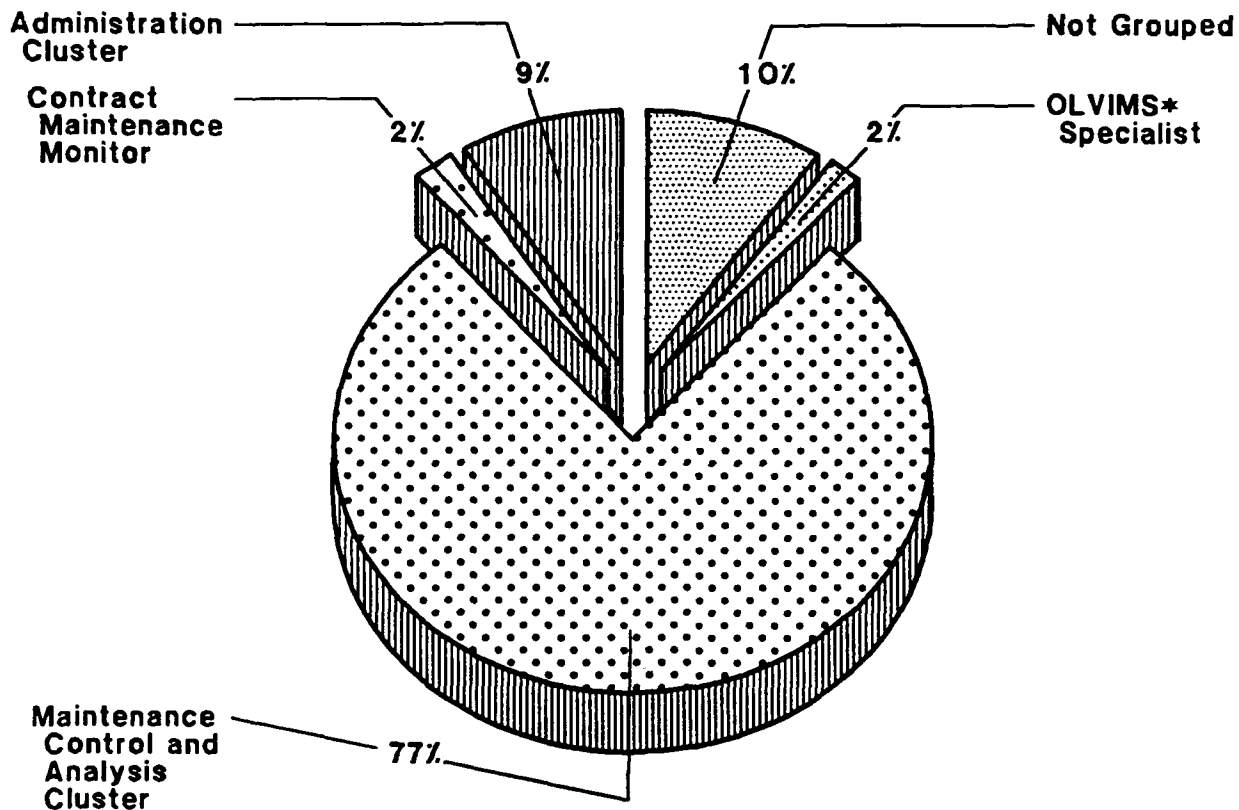


Figure 1

* On-Line Vehicle Interactive Management System

include: Data Input Specialist; Chief, Logistics; HQ Maintenance Control and Analysis (MCA) Superintendent; and Functional Area Specialist.

Group Descriptions

The following paragraphs contain brief descriptions of the two clusters and the two independent jobs identified through the career ladder structure analysis. Representative tasks for all the groups are contained in Appendix A. Selected background data for these groups are provided in Table 3.

I. MAINTENANCE CONTROL AND ANALYSIS CLUSTER (ST0025). The 211 airmen in this cluster of jobs (77 percent of the survey sample) perform both the general control and analysis as well as the comprehensive analysis of vehicle maintenance activities to ensure complete operability of Air Force vehicles. Eighty-five percent of their relative duty time is spent planning, scheduling, coordinating, monitoring, and analyzing vehicle maintenance requirements. These tasks represent the core responsibilities for the specialty. Respondents perform an average of 110 tasks, with 58 tasks accounting for over 50 percent of relative job time. Tasks reflecting these responsibilities include:

- defer workorders in OLVIMS
- assign vehicle maintenance priorities
- analyze vehicle historical records for repetitive maintenance
- calculate vehicle repair costs
- review AFTO Forms 91
- analyze OLVIMS data
- assist vehicle mechanics in preparing deficiency reports

Job structure analysis identified four jobs within this cluster to include: a Production Analysis function (i.e., analyze vehicle data to identify performance trends or problems, determine causes of deficiencies, document any deficiencies in vehicle performance, estimate potential impact on maintenance mission, and ensure correction of deficiencies); a Deficiency Analysis function (i.e., evaluate identified deficiencies or problems with vehicle maintenance to determine cause, estimate potential impact on maintenance mission, and ensure correction of deficiencies); a Maintenance Control function (i.e., schedule, monitor, and coordinate with appropriate agencies vehicle maintenance workorders, and ensure timely correction of work); and a Section NCOIC function (i.e., combination of previous three functions plus a supervisory function). With an average of over 7 years in the career field, all group members reported possession of a 5-skill or 7-skill level DAFSC (51 percent and 49 percent, respectively) and report predominant grades of E-4 or E-5.

TABLE 3

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	MAINT C & A CLUSTER	C & A JOBS					OLVIMS SPECLST
		PROD ANALYS	DEFIC ANALYS	MAINT CNTRL	SECTION		
					NCOIC		
NUMBER IN GROUP	211	131	5	61	14	5	
PERCENT OF SAMPLE	77%	48%	2%	22%	5%	2%	
PERCENT IN CONUS	64%	63%	80%	70%	43%	100%	
DAFSC DISTRIBUTION:							
47234	0	0	0	0	0	0	
47254	51%	40%	80%	85%	0	80%	
47274	49%	60%	20%	15%	100%	20%	
PREDOMINANT GRADE(S)							
AVG MONTHS IN CAREER FIELD	E-4/5	E-5/6	E-5	E-4	E-6	E-5	
AVG MONTHS IN SERVICE	88	97	86	57	139	78	
PERCENT WITH 4 YEARS IN CAREER FIELD (TICF)	142	153	133	103	209	117	
	31%	24%	40%	51%	0	20%	
PERCENT SUPERVISING							
AVG NUMBER OF TASKS PERFORMED	44%	56%	0	8%	86%	0	
	110	139	60	62	75	34	

TABLE 3 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	CONTRACT MAINT MONITOR	ADMIN CLUSTER	ADMINISTRATION JOBS			
			MANAGEMENT	QUALITY ASSURANCE	TRAINING	
NUMBER IN GROUP	6	24	12	6	5	
PERCENT OF SAMPLE	2%	9%	4%	2%	2%	
PERCENT IN CONUS	83%	67%	67%	67%	60%	
DAFSC DISTRIBUTION						
47234	0	0	0	0	0	
47254	50%	4%	0	17%	0	
47274	50%	96%	100%	83%	100%	
PREDOMINANT GRADE(S)	E-5	E-7	E-7	E-7	E-7	
AVG MONTHS IN CAREER FIELD	119	141	150	141	133	
AVG MONTHS IN SERVICE	184	198	206	197	175	
PERCENT WITH 4 YEARS IN CAREER FIELD (TICF)	17%	0	0	0	0	
PERCENT SUPERVISING	50%	58%	83%	17%	40%	
AVG NUMBER OF TASKS PERFORMED	45	42	51	23	47	

A. Production Analysis (ST0050). Representing 48 percent of the survey sample, these 131 members (with the highest average number of tasks performed, 139) concentrate on identifying performance trends or problems and highlighting areas that may represent a standard of excellence. These incumbents analyze and determine the causes for deficiencies through data gathering and surveillance of vehicle management, using performance indicators such as man-hour use, vehicle out-of-commission rates, and cost per mile. Once deficiencies are identified, they then document the deficiencies and assist in developing corrective actions. These airmen address all facets of the maintenance control and analysis process. Eighty-two percent of relative job time is spent on control and analysis activities. Typical tasks performed by these incumbents include:

- analyze OLVIMS data
- review VOC reports
- review man-hour reports
- analyze performance indicator data
- develop vehicle equipment status reports
- monitor vehicles for established maintenance inspections
- review vehicle or equipment modification requests

Sixty percent of these group members report holding the 7-skill level DAFSC and average over 8 years in the career field.

B. Deficiency Analysis (ST0034). In contrast to the preceding group, these five airmen (accounting for 2 percent of the total survey sample) concentrate their time on dealing with deficiencies already identified. These members perform an average of only 60 tasks (with 33 tasks accounting for over 50 percent of relative job time). These airmen focus their time on troubleshooting material consumption, workload distribution, and vehicle scheduling to the degree necessary to ensure effective vehicle maintenance and operation. A total of 71 percent of their relative duty time is spent on control activities and general vehicle maintenance control and analysis activities (39 percent and 32 percent, respectively). Tasks which reflect these responsibilities include:

- monitor TCTO programs
- monitor deficiency reports
- access computerized deficiency report programs
- schedule vehicles for TCTO repairs
- evaluate deficiency reports
- initiate vehicle accident or abuse repair actions

With an average of over 7 years in the career field, three out of the five respondents indicated they possess a 5-skill level, with the remaining two indicating they hold a 7-skill level DAFSC.

C. Maintenance Control (ST0053). This group of 61 airmen distinguishes itself from the other previous groups, by the limited scope of activities it performs. An average of 62 tasks are performed, with 29 tasks accounting for 50 percent of relative job time. These airmen devote 59 percent of their duty time strictly to maintenance control activities which include: scheduling maintenance work to ensure it is accomplished in a timely manner; updating and monitoring the vehicle data collection system; analyzing workorder requirements for vehicle maintenance; and assigning maintenance priorities. Representative tasks include:

- assign vehicle maintenance priorities
- maintain computer-generated workorders
- close out completed workorders in OLVIMS
- defer workorders in OLVIMS
- enter vehicle maintenance codes in OLVIMS
- update vehicle master records

A 5-skill level DAFSC is held by 85 percent of these airmen with the predominant grade of E-4 and an average of over 4 and 1/2 years in the career field (lowest average for the entire survey sample).

D. Section NCOIC (ST0033). Representing 5 percent of the survey sample, these 14 members all indicate they hold the 7-skill level with an average of over 11 and 1/2 years in the career field. While still involved in the previously mentioned maintenance control and analysis duties (67 percent of their relative duty time), these NCOs devote 28 percent of their relative duty time performing supervisory and general workcenter management tasks. With an average of 75 tasks (second highest average number of tasks performed), these members perform a broad range of tasks covering both technical and supervisory responsibilities. Examples of the tasks which define this group include:

- supervise Vehicle Maintenance Control and Analysis Specialists (AFSC 47254)
- write EPRs
- counsel personnel on personal or military-related matters
- analyze OLVIMS data
- monitor TCTO programs
- answer inquiries from organizations concerning vehicles or vehicle parts status
- verify completed workorders

II. ON-LINE VEHICLE INTERACTIVE MANAGEMENT SYSTEM (OLVIMS) SPECIALIST (ST0031). A total of five airmen make up this group who perform very specific activities. These airmen perform an average of 34 tasks, second lowest average number of tasks in the survey sample (with an average of 18 tasks which account for 50 percent of their relative job time), and work predominantly with the Vehicle Interactive Management System (VIMS). These members verify, edit, update, and maintain all data on vehicles, in order to establish and control the vehicle maintenance data system. Types of data collected and stored in VIMS include parts ordered and received, repair and fuel costs, history of repairs, scheduled maintenance, and parts warranties. Typical tasks performed are:

- edit static or variable data in OLVIMS
- verify accuracy of daily inputs in OLVIMS
- update OLVIMS master files
- enter vehicle maintenance system codes in OLVIMS

The majority of these group members report holding the 5-skill level DAFSC, with a grade of E-5 and an average of 6 and 1/2 years in the career field.

III. CONTRACT MAINTENANCE MONITOR (ST0048). Performing primarily maintenance control activities (67 percent of relative duty time), this group of six members distinguishes itself from the previous groups by concentrating on contract maintenance. Typical responsibilities of a contract maintenance monitor include initiating work orders and AF Forms 9 for work to be done, ensuring delivery of vehicles for repairs, coordinating vehicle status with appropriate persons or agencies, and maintaining files on contract maintenance. These members account for 2 percent of the survey sample and predominantly hold the grade of E-5, averaging a little less than 10 years in the career field. Tasks which characterize the average 45 tasks performed (where an average of 20 tasks account for 50 percent of relative job time) include:

- monitor contract maintenance
- monitor vehicles in contract maintenance
- coordinate movement of vehicles or vehicle components to or from contract maintenance with appropriate agencies
- review AF Forms 9 (Request for Purchase)
- review utilization of contract maintenance funds
- calculate contract funds

IV. ADMINISTRATION CLUSTER (ST0006). This cluster of 24 NCOs, representing 9 percent of survey sample, is relatively senior personnel (96 percent hold the 7-skill level and average over 11 and 1/2 years in the career field). This group spends 78 percent of its relative

duty time performing supervisory and general workcenter management and training tasks (57 percent and 21 percent, respectively). Typical tasks performed are:

- conduct self-inspections
- counsel personnel on personal or military-related matters
- write recommendations for awards or decorations
- review drafts of regulations, manuals, or other directives
- evaluate safety or security programs

Job structure analysis identified three jobs within this cluster: a Management function, emphasizing supervisory and managerial activities; a Quality Assurance function focusing on evaluation, inspection, and review of control and analysis activities; and a Training function emphasizing OJT, OLVIMS training, and resident course training. With the predominant grade of E-7, 58 percent of this cluster perform supervisory activities.

A. Management (ST0021). This job is performed by the most senior and experienced personnel (averaging 12 and 1/2 years in the career field) and accounts for 4 percent of the survey sample. All 12 incumbents hold the 7-skill level and perform an average of 51 tasks, of which 80 percent of relative duty time is spent in supervisory and management or training activities (68 percent and 12 percent, respectively). Eighty-three percent of the respondents in this group report performing supervisory responsibilities. Representative supervisory and managerial-type tasks include:

- write recommendations for awards or decorations
- counsel personnel on personal or military-related matters
- conduct self-inspections
- write job descriptions
- determine or establish work schedules or priorities
- assign personnel to duty positions
- endorse enlisted performance reports (EPRs)

B. Quality Assurance (ST0017). The six senior NCOs (second most experienced group, averaging 11 years and 8 months in the career field) forming this group spend an average of 79 percent of relative duty time performing tasks dealing primarily with evaluation, inspection, and review of vehicle maintenance control and analysis functions. This job is very limited in scope with members performing an average of only 23 tasks (fewest number of tasks performed by any group in the career field). These members report holding the 7-skill level (83 percent of survey sample) and hold predominantly the grade of E-7. Tasks which typify this job are:

- evaluate safety or security programs
- conduct self-inspections
- develop self-inspections
- evaluate self-inspections
- evaluate inspection reports
- review vehicle equipment status reports

C. Training (ST0059). Accounting for 68 percent of relative duty time, these 5 airmen spend the majority of their duty time performing training tasks. These members perform a gamut of training activities to include resident course training, OJT, OLVIMS training, and ancillary training. Related duties like preparing for these training programs, coordinating training with affected agencies, determining logistical requirements, and evaluation of trainees are all indicative of the work performed by these members. All of these respondents indicated they possess the 7-skill level, and they average over 11 years in the career field. While performing an average of 47 tasks, just 14 of these tasks account for 50 percent of their relative job time. Typical tasks that describe this job include:

- evaluate progress of trainees
- maintain study reference files
- prepare lesson plans
- write test questions
- conduct on-line vehicle interactive management system (OLVIMS)
training
- counsel trainees on training progress

Comparisons of Specialty Jobs

Two clusters and two independent jobs were identified in the career ladder structure analysis. One cluster and both independent jobs (MAINTENANCE CONTROL AND ANALYSIS CLUSTER, and OLVIMS SPECIALIST and CONTRACT MAINTENANCE MONITOR, respectively) were involved in the performance of the various primary day-to-day technical responsibilities of the career ladder. The remaining cluster, the ADMINISTRATION CLUSTER, can generally be categorized as support and staff personnel (i.e, MANAGEMENT, QUALITY ASSURANCE, and TRAINING).

Comparison of Current Group Descriptions to Previous Survey Findings

The results of the specialty job analysis were compared to those of Occupational Survey Report (OSR) AFPT 90-472-460, VEHICLE MAINTENANCE CONTROL AND ANALYSIS CAREER LADDER, dated June 1983. After reviewing the tasks comprising the jobs identified in 1983, all the jobs with substantial numbers of personnel could be linked to similar jobs in the 1992

sample (see Table 4). Even though some comparable jobs from the 1992 to 1983 samples reflect different percentages, this variation could be attributed to changes in work emphasis or procedures in the field.

There were three jobs (two in the ADMINISTRATION CLUSTER) identified in the current sample which did not have a direct match in the 1983 career ladder structure. One of the jobs with no apparent counterpart in the 1992 sample is noteworthy. The DEFICIENCY ANALYSIS job, although very small, is notable because it may indicate a change in direction (greater emphasis on problem areas) for part of the career ladder. The other two previously unidentified jobs (MANAGEMENT and QUALITY ASSURANCE) represent only 6 percent of the survey sample.

Aside from the above mentioned variations, respondents of the current survey are essentially performing the same jobs that were found in the 1983 survey. This suggests the Vehicle Maintenance Control and Analysis specialty has remained relatively stable over time.

ANALYSIS OF DAFSC GROUPS

Analysis of DAFSC groups, together with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed by members of the various skill-level groups, which in turn may be used to determine how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the STS, reflect what members of the various skill-level groups are doing.

The distribution of skill-level members across the specialty jobs is displayed in Table 5, while relative amounts of time members of the various skill-level groups spend on duties is shown in Table 6. These data show a distinction between the responsibilities of members of the skill levels, with a steady decrease in involvement in the technical aspects of the career ladder and an increase in involvement in managerial activities as members progress through the skill levels.

Skill-Level Descriptions

DAFSC 47254. DAFSC 47254 respondents comprise 46 percent of the survey sample. As shown in Table 5, 86 percent of the 125 members forming this group perform jobs in the Maintenance Control and Analysis cluster discussed earlier. Nine percent could not be grouped into any job because of the diversity of tasks they perform. The remaining 5 percent (11 members) work as OLVIMS Specialists or Contract Maintenance Monitors. Representative tasks DAFSC 47254 members perform are listed in Table 7.

TABLE 4

JOB SPECIALTY COMPARISONS BETWEEN CURRENT AND 1983 SURVEY

<u>CURRENT (N=272)</u>	<u>PERCENT OF SAMPLE</u>	<u>1982 (N=337)</u>	<u>PERCENT OF SAMPLE</u>
I. MAINTENANCE CONTROL AND ANALYSIS CLUSTER	77%	I. (Items A, C, & D)	
A. Production Analysis	48%	A. Vehicle Maintenance Analysis Cluster	42%
B. Deficiency Analysis	2%	B. Not Identified	
C. Maintenance Control	22%	C. Vehicle Production Analysis Cluster	28%
D. Section NCOIC	5%	D. NCOIC, Maintenance Control and Analysis	6%
II. ON-LINE VEHICLE INTERACTIVE MAINTENANCE SYSTEM (OLVIMS) SPECIALIST	2%	II. JUNIOR VEHICLE MAINTENANCE DATA CONTROL ANALYST	9%
III. CONTRACT MAINTENANCE MONITOR	2%	III. VEHICLE CONTRACT MAINTENANCE MONITOR	4%
IV. ADMINISTRATION CLUSTER	9%	IV. NOT IDENTIFIED	
A. Management	4%	A. Not identified	
B. Quality Assurance	2%	B. Not identified	
C. Training	2%	C. Training	2%

TABLE 5
DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS
CAREER LADDER JOBS
(PERCENT)

<u>CAREER LADDER JOBS</u>	DAFSC 47254 (N=125)	DAFSC 47274 (N=147)
I. MAINTENANCE CONTROL AND ANALYSIS CLUSTER (N=211)	86	70
A. Production Analysis (N=131)	(42)	(53)
B. Deficiency Analysis (N=5)	(3)	(*)
C. Maintenance Control (N=61)	(41)	(6)
D. Section NCOIC (N= 14)	(0)	(10)
II. ON-LINE VEHICLE INTERACTIVE MANAGEMENT SYSTEM (OLVIMS) SPECIALIST (N=5)	3	*
III. CONTRACT MAINTENANCE MONITOR (N=6)	2	2
IV. ADMINISTRATION CLUSTER (N=24)	*	16
A. Management (N=12)	(0)	(8)
B. Quality Assurance (N=6)	(*)	(3)
C. Training (N=5)	(0)	(3)
NOT GROUPED	9	12

* Less than 1 percent

NOTE: Percentages in parenthesis are subsets of the respective cluster

TABLE 6

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY DAFSC GROUPS
(RELATIVE PERCENT OF JOB TIME)

<u>DUTIES</u>	47254 (N=125)	47274 (N=147)
A. PERFORMING SUPERVISOR AND GENERAL WORKCENTER MANAGEMENT TASKS	7	25
B. PERFORMING TRAINING TASKS	1	7
C. PERFORMING GENERAL VEHICLE MAINTENANCE CONTROL AND ANALYSIS ACTIVITIES	25	17
D. PERFORMING MAINTENANCE ANALYSIS ACTIVITIES	15	18
E. PERFORMING MAINTENANCE CONTROL ACTIVITIES	52	33

TABLE 7
REPRESENTATIVE TASKS PERFORMED BY
47254 PERSONNEL

<u>TASKS</u>	<u>PERCENT</u> <u>MEMBERS</u> <u>PERFORMING</u> <u>(N=125)</u>
E237 Open vehicle or equipment workorders in OLVIMS	90
C92 Access OLVIMS menus and data screens	87
E194 Close out completed workorders in OLVIMS	86
C106 Maintain computer-generated workorders	85
E207 Defer workorders in OLVIMS	85
C100 Enter vehicle maintenance system codes in OLVIMS	82
E213 Download OLVIMS for end-of-day processing	82
E238 Perform backups of OLVIMS	79
D179 Update vehicle master records	79
E186 Assign vehicle maintenance priorities	77
C108 Maintain current status of deferred vehicle parts in OLVIMS	77
C109 Maintain OLVIMS disk and tape files	76
C127 Update OLVIMS master files	75
C112 Maintain vehicle historical records	72
C98 Edit static or variable data in OLVIMS	70
E193 Calculate vehicle repair costs	70
E255 Update computer-generated vehicle historical records	68
C103 Establish vehicle master records	67
E241 Prepare vehicle out-of-commission (VOC) reports	62
D176 Review vehicle status and control boards or charts	62
E263 Verify completed workorders	58
C129 Verify accuracy of daily inputs in OLVIMS	57
C123 Transfer data files between multicomputer systems	56
E210 Dispatch vehicle maintenance service calls	54
E245 Review deferred maintenance parts requests	50
E253 Schedule vehicles for established maintenance inspections, other than one-time or special inspections	48

DAFSC 47274. Seven-skill level personnel constitute 54 percent of the sample and, as shown in Table 5, are involved in most of the jobs identified by survey data. The 147 personnel in this group perform an average of 106 tasks, with 81 tasks comprising over 50 percent of their job time. Sixty-eight percent report having supervisory responsibilities, with a substantial number performing a combination of first-line supervisory and technical maintenance functions. Seventy percent of this group are found in the Maintenance Control and Analysis cluster with an additional 16 percent performing jobs in the Administration cluster. Representative tasks performed by 7-skill level members are listed in Table 8 and include a mixture of technical and supervisory tasks. Table 9 lists examples of tasks that best differentiate between AFSC 47254 and 47274 personnel. Figures in the top portion of the table show a greater percentage of 5-skill level personnel perform the technical tasks, while figures in the lower half clearly show more 7-skill level personnel perform supervisory and administrative tasks.

Summary

Distinctions between skill-level groups are evident, with personnel at the 5-skill level spending the vast majority of their time performing technical tasks across a number of distinctly different jobs. At the 7-skill level, although members still spend over half of their relative duty time on nonsupervisory tasks, a shift toward supervisory functions is quite clear.

AFR 39-1 SPECIALTY JOB DESCRIPTION ANALYSIS

Survey data were compared to the AFR 39-1 Specialty Descriptions for Vehicle Maintenance Control and Analysis Specialist and Supervisor, both dated 30 April 1991. These descriptions are intended to give a broad overview of the duties and tasks performed in each skill level of the specialty.

The descriptions for the 5- and 7-skill levels were well supported by findings of this survey. The descriptions depict the highly technical aspect of the job, as well as the increase in supervisory responsibilities previously described in the DAFSC analysis.

JOB SATISFACTION

Respondents were asked to indicate how interested they are in their jobs, perceived use of talents and training, and their reenlistment intentions. Satisfaction indicators for TICF groups in the present study were compared to those of the previous OSR published in 1983 (Table 10). Overall, job satisfaction indicators have remained fairly consistent with only minor variations over the past 9 years.

TABLE 8
REPRESENTATIVE TASKS PERFORMED BY
47274 PERSONNEL

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=147)</u>
C92 Access OLVIMS menus and data screens	79
C98 Edit static or variable data in OLVIMS	70
E238 Perform backups of OLVIMS	67
E237 Open vehicle or equipment workorders in OLVIMS	67
C100 Enter vehicle maintenance system codes in OLVIMS	67
D131 Analyze OLVIMS data	65
E194 Close out completed workorders in OLVIMS	65
A14 Determine or establish work schedules or priorities	65
E251 Review VOC reports	65
D179 Update vehicle master records	64
A56 Write EPRs	64
A7 Conduct self-inspections	63
D165 Review man-hour utilization reports	61
C109 Maintain OLVIMS disk and tape files	61
A45 Plan or schedule work assignments or priorities	60
A24 Evaluate job descriptions	59
E204 Coordinate vehicle disposition with vehicle fleet management personnel	57
E206 Correct errors in vehicle maintenance source documents	57
D132 Analyze performance indicator data	57
E242 Prepare vehicle status reports, other than VOC reports	56
C112 Maintain vehicle historical records	55
C129 Verify accuracy of daily inputs in OLVIMS	54
D149 Develop vehicle equipment status reports	53
A58 Write recommendations for awards or decorations	52
A17 Develop work methods or procedures	49
A50 Supervise civilian personnel	35
A54 Supervise military personnel with AFSCs other than 472X4	34
A31 Evaluate self-inspection programs or checklists	31

TABLE 9

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 47254 AND DAFSC 47274 PERSONNEL
(PERCENT MEMBERS PERFORMING)

<u>TASKS</u>	47254 (N=125)	47274 (N=292)	<u>DIFFERENCE</u>
C108 Maintain current status of deferred vehicle parts in OL VIMS	77	50	27
C106 Maintain computer-generated workorders	85	61	24
E207 Defer workorders in OL VIMS	85	62	23
E237 Open vehicle or equipment workorders in OL VIMS	90	67	23
E194 Close out completed workorders in OL VIMS	86	65	21
E187 Assign vehicle repairs to appropriate workcenters	82	61	21
A12 Counsel personnel on personal or military-related matters	13	68	-55
A56 Write EPRs	11	64	-53
A6 Conduct performance feedback worksheet (PFW) evaluation sessions	10	62	-50
A7 Conduct self-inspections	18	63	-45
A52 Supervise Vehicle Maintenance Control and Analysis Specialists (AFSC 47254)	10	54	-44
A42 Interpret policies, directives, or procedures for subordinates	11	55	-44

TABLE 10

COMPARISON OF 472X4 JOB SATISFACTION INDICATORS
FOR CURRENT AND PREVIOUS SURVEY
(Percent Members Responding)

	1-48 MOS TIF		49-96 MOS TIF		97+ MOS TIF	
	CURRENT	1983	CURRENT	1983	CURRENT	1983
	(N=71)	(N=207)	(N=91)	(N=67)	(N=110)	(N=37)
<u>EXPRESSED JOB INTEREST:</u>						
Interesting	68	76	80	84	66	68
So-So	20	12	10	9	22	24
Dull	12	9	9	6	12	5
<u>PERCEIVED USE OF TALENTS:</u>						
Fairly Well to Excellent	83	82	81	85	77	84
Little or Not at All	17	18	18	15	23	16
<u>PERCEIVED USE OF TRAINING:</u>						
Fairly Well to Excellent	79	80	81	75	85	76
Little or Not at All	21	20	18	25	15	24
<u>REENLISTMENT INTENTIONS:</u>						
Plan to Reenlist	77	74	81	79	55	68
Plan Not to Reenlist	20	16	14	15	10	8
Plan to Retire	3	8	4	5	35	24

NOTE: Columns may not add up to 100 percent due to nonresponse and rounding

Satisfaction indicators for members in the various jobs are shown in Table 11. Most respondents find their work interesting and perceive their talents and training are being used. Of all the jobs identified, though, OLVIMS Specialists and Contract Monitors perceived their jobs as being the least satisfying. Administration cluster personnel, on the other hand, perceive their jobs to be highly interesting. Members in the Maintenance Control and Analysis cluster indicate the most effective use of their talents and training. Personnel working in Management or as Section NCOICs are the most senior as they reflect the highest percentage of members (58 and 57 percent, respectively) who plan to retire. Overall, personnel across all career ladder jobs are satisfied with their jobs, feel their talents and training are being utilized, and gain some sense of accomplishment from their work.

IMPLICATIONS

This survey was requested by training personnel to obtain current task and equipment data for use in evaluation of current training programs. This objective was met as a new STS has been developed for this career ladder using OSR data. Additionally, a resident 7-skill level awarding course has also been outlined. However, these actions are on hold pending a restructuring of the Vehicle Maintenance career field.

The findings of this survey suggest a relatively stable and homogeneous specialty with a classification structure which accurately portrays the jobs in this career ladder. A noteworthy characteristic regarding career ladder progression is the expediency with which personnel obtain their 5-skill level; very few, if any, 3-skill level personnel are in this specialty at any point in time.

No serious job satisfaction problems appear to exist within this specialty. Job satisfaction indicators over the past 9 years have remained fairly consistent with only a few minor variations being noted.

TABLE 11

COMPARISON OF JOB SATISFACTION INDICATORS FOR MEMBERS OF 472X4 SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	MAINT C & A CLUSTER (N=211)	PROD ANALYS (N=131)	DEFIC ANALYS (N=5)	MAINT CNTRL (N=61)	SECTION NCOIC (N=14)	OLVIMS SPECLST (N=5)
<u>EXPRESSED JOB INTEREST:</u>						
Interesting	72	75	80	62	79	40
So-So	17	14	20	23	21	40
Dull	11	11	0	13	0	20
<u>PERCEIVED USE OF TALENTS:</u>						
Fairly Well to Excellent	81	85	100	67	79	60
Little or Not At All	18	15	0	31	21	40
<u>PERCEIVED USE OF TRAINING:</u>						
Fairly Well to Excellent	86	84	100	85	100	60
Little to Not At All	14	16	0	13	0	40

NOTE: Columns may not add to 100 percent due to nonresponse or rounding

TABLE 11 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR MEMBERS OF 472X4 SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	MAINT C & A CLUSTER (N=211)	C & A JOBS					SECTION NCOIC (N=14)	OLVIMS SPECLST (N=5)				
		PROD ANALYS (N=131)	DEFIC ANALYS (N=5)	MAINT CNTRL (N=61)								
<u>SENSE OF ACCOMPLISHMENT GAINED FROM</u>												
<u>WORK:</u>												
Satisfied	66	72	80	56	57	60						
Neutral	12	8	20	20	14	0						
Dissatisfied	21	20	0	23	29	40						
<u>REENLISTMENT INTENTIONS:</u>												
Plan to Reenlist	71	76	60	67	36	60						
Plan Not to Reenlist	15	10	0	28	7	40						
Plan to Retire	14	14	40	3	57	0						

NOTE: Columns may not add to 100 percent due to nonresponse or rounding

TABLE 11 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR MEMBERS OF 472X4 SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	CONTRACT MONITOR (N=6)	ADMIN CLUSTER (N=24)	ADMINISTRATION JOBS		
			MANAGEMENT (N=12)	QUALITY ASSURANCE (N=6)	TRAINING (N=5)
<u>EXPRESSED JOB INTEREST</u>					
Interesting	33	79	75	67	100
So-So	33	13	17	17	0
Dull	33	8	8	17	0
<u>PERCEIVED USE OF TALENTS:</u>					
Fairly Well to Excellent	67	71	59	84	100
Little or Not At All	33	29	42	17	0
<u>PERCEIVED USE OF TRAINING:</u>					
Fairly Well to Excellent	50	71	58	84	100
Little to Not At All	50	29	42	17	0

NOTE: Columns may not add to 100 percent due to nonresponse or rounding

TABLE 11 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR MEMBERS OF 472X4 SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	CONTRACT MONITOR (N=6)	ADMIN CLUSTER (N=24)	ADMINISTRATION JOBS		
			MANAGEMENT (N=12)	QUALITY ASSURANCE (N=6)	TRAINING (N=5)
<u>SENSE OF ACCOMPLISHMENT GAINED</u>					
<u>FROM WORK:</u>					
Satisfied	50	63	50	67	100
Neutral	0	21	25	17	0
Dissatisfied	50	17	25	17	0
<u>REENLISTMENT INTENTIONS:</u>					
Plan to Reenlist	83	54	33	67	80
Plan Not to Reenlist	0	13	8	17	20
Plan to Retire	17	33	58	17	0

NOTE: Columns may not add to 100 percent due to nonresponse or rounding

APPENDIX A

**SELECTED REPRESENTATIVE TASKS PERFORMED BY
MEMBERS OF CAREER LADDER JOBS**

TABLE I

MAINTENANCE CONTROL AND ANALYSIS CLUSTER (ST0025)

GROUP SIZE: 211

AVERAGE TICF: 88 MONTHS

PERCENT OF SAMPLE: 77%

AVERAGE TAFMS: 142 MONTHS

PREDOMINANT GRADE: E-4/E-5

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING

<u>REPRESENTATIVE TASKS</u>		<u>PERCENT MEMBERS PERFORMING</u>
E237	Open vehicle or equipment work orders in OLVIMS	94
C92	Access OLVIMS menus and data screens	93
E184	Answer inquiries from organizations concerning vehicles or vehicle parts status	92
E194	Close out completed work orders in OLVIMS	91
E185	Answer inquiries from work center supervisors concerning vehicles or vehicle parts status	91
E207	Defer work orders in OLVIMS	89
C99	Enter static or variable data in OLVIMS, other than maintenance system codes	87
E187	Assign vehicle repairs to appropriate work centers	86
E186	Assign vehicle maintenance priorities	85
C109	Maintain OLVIMS disk and tape files	83
E256	Update estimated time in commission (ETIC) or parts status	81
E260	Update status of VDPs in OLVIMS	80
E193	Calculate vehicle repair costs	76
E241	Prepare vehicle out-of-commission (VOC) reports	74
D164	Review AFTO Forms 91	73
E202	Coordinate on AF Forms 1832 (Record of Cannibalization (Vehicle Maint)) received from materiel control section	68
D131	Analyze OLVIMS data	65
E199	Coordinate cannibalization of vehicle parts with materiel control section	63
D175	Review vehicle replacement codes	62
D143	Compile computer data or listings for vehicle maintenance summaries, special reports, or staff studies	61
E235	Monitor vehicles for established maintenance inspections	55

TABLE IA

PRODUCTION ANALYSIS (ST0050)

GROUP SIZE: 131

AVERAGE TICE: 97 MONTHS

PERCENT OF SAMPLE: 48%

AVERAGE TAFMS: 153 MONTHS

PREDOMINANT GRADE: E-4/E-5

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING

<u>REPRESENTATIVE TASKS</u>		<u>PERCENT MEMBERS PERFORMING</u>
D164	Review AFTO Forms 91	87
D131	Analyze OLVIMS data	86
E260	Update status of VDPs in OLVIMS	86
D143	Compile computer data or listings for vehicle maintenance summaries, special reports, or staff studies	82
D175	Review vehicle replacement codes	80
E251	Review VOC reports	79
D165	Review man-hour utilization reports	79
D155	Finalize AFTO Forms 91 (Limited Technical Inspection - Motor Vehicles)	77
E245	Review deferred maintenance parts requests	76
D170	Review REM listings	76
D146	Correct vehicle replacement codes	74
D134	Analyze vehicle historical records for repetitive maintenance	73
D132	Analyze performance indicator data	72
E250	Review vehicle and equipment assigned replacement codes A through J	71
E235	Monitor vehicles for established maintenance inspections	69
E201	Coordinate movement of vehicles or vehicle components to or from contract maintenance with appropriate agencies	69
D149	Develop vehicle equipment status reports	69
E205	Coordinate vehicle maintenance repairs with appropriate agencies	69
D174	Review vehicle or equipment modification requests	69
D166	Review miles, hours, or kilometers per gallon of fuel rates reports	68
E209	Develop annual vehicle scheduled maintenance plans	67
D171	Review vehicle cost per mile, hour, or unit reports	66

TABLE IB
DEFICIENCY ANALYSIS (ST0034)

GROUP SIZE: 5	AVERAGE TICF: 86 MONTHS
PERCENT OF SAMPLE: 2%	AVERAGE TAFMS: 133 MONTHS
PREDOMINANT GRADE: E-5	

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

<u>REPRESENTATIVE TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
E231 Monitor TCTO programs	100
D158 Monitor deficiency reports	100
C91 Access computerized deficiency report programs	100
D164 Review AFTO Forms 91	100
D155 Finalize AFTO Forms 91 (Limited Technical Inspection - Motor Vehicles)	100
E190 Assist vehicle mechanics in preparing deficiency reports	80
E254 Schedule vehicles for TCTO repairs	80
E225 Maintain time compliance technical orders (TCTOs)	80
C105 Initiate computerized deficiency reports	80
A22 Evaluate deficiency reports	80
C106 Maintain computer-generated work orders	80
E184 Answer inquiries from organizations concerning vehicles or vehicle parts status	80
C104 Format and prepare computers to accept OLVIMS program software	80
C119 Recover OLVIMS from system maintenance	80
C113 Make entries on AF Forms 20 (Repair Cost and Repairable Value Statement)	80
E216 Initiate vehicle accident or abuse repair actions	60
C111 Maintain vehicle accident and abuse program case files	60
E204 Coordinate vehicle disposition with vehicle fleet management personnel	60
E243 Review actions taken on TCTOs	60
C118 Print computerized deficiency reports	60

TABLE IC
MAINTENANCE CONTROL (ST0053)

GROUP SIZE: 61	AVERAGE TICE: 57 MONTHS
PERCENT OF SAMPLE: 22%	AVERAGE TAFMS: 103 MONTHS
PREDOMINANT GRADE: E-4	

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

<u>REPRESENTATIVE TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
E237 Open vehicle or equipment work orders in OLVIMS	97
C92 Access OLVIMS menus and data screens	97
C106 Maintain computer-generated work orders	97
E194 Close out completed work orders in OLVIMS	95
E207 Defer work orders in OLVIMS	95
E187 Assign vehicle repairs to appropriate work centers	93
E213 Download OLVIMS for end-of-day processing	92
C100 Enter vehicle maintenance system codes in OLVIMS	90
E186 Assign vehicle maintenance priorities	89
E223 Maintain automated vehicle status and control boards or charts	84
E256 Update estimated time in commission (ETIC) or parts status	82
E263 Verify completed work orders	80
C99 Enter static or variable data in OLVIMS, other than maintenance system codes	80
E260 Update status of VDPs in OLVIMS	80
D179 Update vehicle master records	80
E259 Update parameter transactions in OLVIMS	75
E239 Perform vehicle yard checks	74
E193 Calculate vehicle repair costs	74
C112 Maintain vehicle historical records	72
E191 Calculate one-time repair allowances for codes A through J vehicles	72
C127 Update OLVIMS master files	70
E241 Prepare vehicle out-of-commission (VOC) reports	69
E225 Update computer-generated vehicle historical records	67
E189 Assist vehicle mechanics in preparing AFTO Forms 91 (Limited Technical Inspection-Motor Vehicles)	66
C98 Edit static or variable data in OLVIMS	64

TABLE ID

SECTION NCOIC (ST0033)

GROUP SIZE: 14
PERCENT OF SAMPLE: 5%
PREDOMINANT GRADE: E-6

AVERAGE TICF: 139 MONTHS
AVERAGE TAFMS: 209 MONTHS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

<u>REPRESENTATIVE TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
A52 Supervise Vehicle Maintenance Control and Analysis Specialists (AFSC 47254)	100
A56 Write EPRs	93
A6 Conduct performance feedback worksheet (PFW) evaluation sessions	93
A12 Counsel personnel on personal or military-related matters	93
A8 Conduct staff meetings or briefings	86
D131 Analyze OLVIMS data	79
D165 Review man-hour utilization reports	79
A49 Schedule personnel for leaves, passes, or TDYs	79
A20 Establish performance standards for subordinates	79
E184 Answer inquiries from organizations concerning vehicles or vehicle parts status	71
A11 Coordinate vehicle maintenance problems with other units or agencies	71
A50 Supervise civilian personnel	64
A9 Conduct supervisory orientations of newly assigned personnel	64
D143 Compile computer data or listings for vehicle maintenance summaries, special reports, or staff studies	57
D132 Analyze performance indicator data	57
E251 Review VOC reports	57
B64 Conduct on-line vehicle interactive management system (OLVIMS) training	57
A7 Conduct self-inspections	57
E263 Verify completed work orders	57
A14 Determine or establish work schedules or priorities	57
A18 Direct development or maintenance of status indicators, such as boards, graphs, or charts	50

TABLE II

ON-LINE VEHICLE INTERACTIVE MANAGEMENT SYSTEM (OLVIMS)
SPECIALIST (ST0031)

GROUP SIZE: 5

AVERAGE TICF: 78 MONTHS

PERCENT OF SAMPLE: 2%

AVERAGE TAFMS: 117 MONTHS

PREDOMINANT GRADE: E-5

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING

<u>REPRESENTATIVE TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
C98 Edit static or variable data in OLVIMS	100
C129 Verify accuracy of daily inputs in OLVIMS	100
C99 Enter static or variable data in OLVIMS, other than maintenance system codes	100
C92 Access OLVIMS menus and data screens	100
D152 Edit and correct registered equipment maintenance (REM) listings	80
C127 Update OLVIMS master files	80
C106 Maintain computer-generated work orders	80
C112 Maintain vehicle historical records	80
C107 Maintain computer listing files, other than computer-generated work orders	80
C101 Establish or update employee master records	80
E263 Verify completed work orders	80
D179 Update vehicle master records	80
C103 Establish vehicle master records	60
C116 Post computerized maintenance listings	60
E237 Open vehicle or equipment work orders in OLVIMS	60
C100 Enter vehicle maintenance system codes in OLVIMS	60
C109 Maintain OLVIMS disk and tape files	60
E211 Download OLVIMS accounting and finance disk files	60
E212 Download OLVIMS BEAMS disk files	60
C119 Recover OLVIMS from system malfunctions	60
E259 Update parameter transactions in OLVIMS	60

TABLE III

CONTRACT MAINTENANCE MONITOR (ST0048)

GROUP SIZE: 6

AVERAGE TICF: 119 MONTHS

PERCENT OF SAMPLE: 2%

AVERAGE TAFMS: 184 MONTHS

PREDOMINANT GRADE: E-5

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING

<u>REPRESENTATIVE TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
E228 Monitor contract maintenance programs	100
E236 Monitor vehicles in contract maintenance	100
E201 Coordinate movement of vehicles or vehicle components to or from contract maintenance with appropriate agencies	100
E244 Review AF Forms 9 (Request for Purchase)	100
E200 Coordinate contract maintenance with appropriate agencies	100
E203 Coordinate transportation of vehicles under warranty to or from dealers with appropriate agencies	100
E226 Make entries on AF Forms 9 (Request for Purchase)	100
E219 Inspect completed contract maintenance work	100
E249 Review utilization of contract maintenance funds	83
E246 Review downtime of vehicles in contract maintenance	83
E210 Dispatch vehicle maintenance service calls	83
E234 Monitor vehicle warranty programs	67
D136 Calculate contract funds	67
E205 Coordinate vehicle maintenance repairs with appropriate agencies	67
E225 Maintain time compliance technical orders (TCTOs)	67
D181 Verify DD Forms 250 (Material Inspection and Receiving Report)	67
E231 Monitor TCTO programs	67
E252 Schedule one-time inspections or special inspections of vehicles	67
E254 Schedule vehicles for TCTO repairs	67

TABLE IV

ADMINISTRATION CLUSTER (ST0006)

GROUP SIZE: 24

AVERAGE TICF: 141 MONTHS

PERCENT OF SAMPLE: 9%

AVERAGE TAFMS: 198 MONTHS

PREDOMINANT GRADE: E-7

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING

<u>REPRESENTATIVE TASKS</u>		<u>PERCENT MEMBERS PERFORMING</u>
A7	Conduct self-inspections	96
A12	Counsel personnel on personal or military-related matters	79
A43	Participate in meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	79
A8	Conduct staff meetings or briefings	75
A58	Write recommendations for awards or decorations	67
A56	Write EPRs	63
A6	Conduct performance feedback worksheet (PFW) evaluation sessions	63
A47	Review drafts of regulations, manuals, or other directives	63
A9	Conduct supervisory orientations of newly assigned personnel	58
A30	Evaluate safety or security programs	54
A28	Evaluate personnel for compliance with performance standards or technical orders	50
A59	Write staff studies, surveys, or special reports, other than training reports	50
A16	Develop self-inspection program checklists	50
A3	Assign personnel to duty positions	50
A49	Schedule personnel for leaves, passes, or TDYs	50
A31	Evaluate self-inspection program or checklists	46
A25	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program standards	46
A14	Determine or establish work schedules or priorities	46
A42	Interpret policies, directives, or procedures for subordinates	46
A13	Determine logistics requirements, such as personnel, facilities, equipment, materials, or supplies	46
A38	Endorse enlisted performance reports (EPRs)	46
A57	Write job descriptions	46

TABLE IVA
MANAGEMENT (ST0021)

GROUP SIZE: 12
PERCENT OF SAMPLE: 4%
PREDOMINANT GRADE: E-7

AVERAGE TICF: 150 MONTHS
AVERAGE TAFMS: 206 MONTHS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

<u>REPRESENTATIVE TASKS</u>		<u>PERCENT MEMBERS PERFORMING</u>
A58	Write recommendations for awards or decorations	100
A12	Counsel personnel on personal or military-related matters	100
A7	Conduct self-inspections	100
A6	Conduct performance feedback worksheet (PFW) evaluation sessions	92
A56	Write EPRs	92
A43	Participate in meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	83
A49	Schedule personnel for leaves, passes, or TDYs	83
A57	Write job descriptions	83
A8	Conduct staff meetings or briefings	83
A9	Conduct supervisory orientations of newly assigned personnel	83
A14	Determine or establish work schedules or priorities	75
A3	Assign personnel to duty positions	75
A20	Establish performance standards for subordinates	75
A38	Endorse enlisted performance reports (EPRs)	67
A47	Review drafts of regulations, manuals, or other directives	67
A28	Evaluate personnel for compliance with performance standards or technical orders	67
A17	Develop work methods or procedures	58
A45	Plan or schedule work assignments or priorities	58
A42	Interpret policies, directives, or procedures for subordinates	58
A2	Analyze workload requirements	58
B61	Assign on-the-job training (OJT) trainers or supervisors	58
A54	Supervise military personnel with AFSCs, other than 472X4	50
A13	Determine logistics requirements, such as personnel, facilities, equipment, materials, or supplies	50
A50	Supervise civilian personnel	50

TABLE IVB

QUALITY ASSURANCE (ST0017)

GROUP SIZE: 6
 PERCENT OF SAMPLE: 2%
 PREDOMINANT GRADE: E-7

AVERAGE TICF: 141 MONTHS
 AVERAGE TAFMS: 197 MONTHS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

<u>REPRESENTATIVE TASKS</u>		<u>PERCENT MEMBERS PERFORMING</u>
A30	Evaluate safety or security programs	100
A7	Conduct self-inspections	100
A16	Develop self-inspection program checklists	100
A31	Evaluate self-inspection programs or checklists	83
A47	Review drafts of regulations, manuals, or other directives	83
A59	Write staff studies, surveys, or special reports, other than training reports	67
A23	Evaluate inspection reports	67
A28	Evaluate personnel for compliance with performance standards or technical orders	50
A25	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program standards	50
A34	Implement safety or security programs	50
A11	Coordinate vehicle maintenance problems with other units or agencies	50
D172	Review vehicle equipment status reports	50
D171	Review vehicle cost per mile, hour, or unit reports	50

TABLE IVC
TRAINING (ST0059)

GROUP SIZE: 5
PERCENT OF SAMPLE: 2%
PREDOMINANT GRADE: E-7

AVERAGE TICF: 133 MONTHS
AVERAGE TAFMS: 175 MONTHS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING

<u>REPRESENTATIVE TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
B76 Evaluate progress of trainees	100
B81 Maintain study reference files	100
B85 Prepare lesson plans	100
B82 Maintain training records, charts, graphs, or files	100
B80 Inspect training aids for operation or suitability	100
B64 Conduct on-line vehicle interactive management system (OLVIMS) training	100
B86 Prepare training schedules	100
B68 Counsel trainees on training progress	100
B89 Write test questions	100
B87 Procure training aids, space, or equipment	100
B65 Conduct resident course classroom training	80
B73 Evaluate effectiveness of training programs	80
B77 Evaluate training methods or techniques	80
B60 Administer or score tests	80
B72 Develop master training plans	80
B71 Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs)	80
C115 Perform annual inspections of administrative and technical order publications files	80
C96 Determine publication requirements	80
B69 Determine training requirements, such as OJT or OLVIMS training	80
B83 Plan or schedule training, such as OJT, OLVIMS training, or ancillary training	60
B67 Coordinate training schedules with affected agencies	60
C110 Maintain technical order libraries	60